

Article VI Critical Area

§ 190-130. Intent and Purpose

A. Intent

In 1984, the Maryland General Assembly passed the Chesapeake Bay Critical Area Act in response to growing concern over the decline of the quality and productivity of the waters of the Chesapeake Bay and its tributaries. The decline was found to have resulted, in part, from the cumulative effects of human activity that caused increased levels of pollutants, nutrients, and toxins, and also from declines in protective land uses such as forest land and agricultural land in the Bay region.

B. Purpose

The General Assembly enacted the Critical Area Act for the following purposes:

- (1) To establish a resource protection program for the Chesapeake Bay and its tributaries by fostering more sensitive development activity for certain shoreline areas so as to minimize impacts to water quality and natural habitats; and
- (2) To implement a resource protection program on a cooperative basis between the State and affected local governments, with local governments establishing and implementing their programs in a consistent and uniform manner subject to State Criteria and oversight.

C. County Critical Area Program

The County's Critical Area Program became effective on August 13, 1989.

D. These provisions regulate development activities and resource utilization activities, e.g., agriculture and forestry, within the Critical Area. They supplement existing land use regulations by imposing specific standards and requirements as set forth in the Critical Area Act and Criteria. In the case of conflicting provisions, the stricter provisions shall apply.

§ 190-131. Applicability

- A. The regulations in this article apply within the Critical Area. §190-10 shows the relationship between the various zoning districts within the Critical Area and the Critical Area designations of Resource Conservation Area (RCA), Limited Development Area (LDA), and Intensely Developed Area (IDA). Any applicant for a permit or license to pursue development activities within the Critical Area shall have such permits or licenses issued by the appropriate regulatory authorities after review under the County's Critical Area Program.
- B. Regulations relating to the administration of the County's Critical Area requirements are in Article IX.

§ 190-132. Prohibited Uses

The following uses are prohibited in the Critical Area.

- A. Non-maritime heavy industry;
- B. Transportation facilities and utility transmission facilities, except those necessary to serve permitted uses, or where regional or interstate facilities must cross tidal waters (utility transmission facilities do not include power plants);
- C. Permanent sludge handling, storage, and disposal facilities with the exception of those facilities associated with current wastewater treatment operations in Talbot County, and excepting the agricultural or horticultural land applications of sludge (with Maryland state approvals and approved application methods and rates) outside of the shoreline development buffer;
- D. Solid or hazardous waste collection or disposal facilities;
- E. Sanitary landfills;
- F. Septage storage or holding facilities, except facilities on the site of a Talbot County Wastewater Treatment Plant; and,
- G. Boathouses and floating residences.

§ 190-133. Agricultural uses

Permitted agricultural uses in the Critical Area shall be conducted in accord with the following provisions:

- A. Creation of new agricultural lands
 - (1) Agricultural activity permitted within the Critical Area shall utilize Best Management Practices in accordance with a Soil Conservation and Water Quality Plan approved by the County Soil Conservation District (see subsection B(3) below).
 - (2) The creation of new agricultural lands shall not be accomplished by:
 - (1) Diking, draining, or filling of any class or subclass of palustrine wetlands as described in the State Critical Area Program which are seasonally flooded, unless mitigation is accomplished in accordance with applicable State and County regulations;
 - (2) Clearing forests or woodlands with soils having a slope greater than 15 percent; or on soils with a K-value greater than 0.35 and slope greater than five percent;
 - (3) Clearing vegetation that will adversely affect water quality or will destroy plant and wildlife habitats; or
 - (4) The clearing of existing natural vegetation within the Shoreline Development Buffer.
- B. Agricultural uses

The following requirements shall be met for agricultural uses:

 - (1) Vegetated filter strip

- (1) Landowners shall establish and maintain a vegetated filter strip of not less than 25 feet along the tidal shoreline and tributary streams of agricultural fields utilizing no-till farming practices. The filter strip shall be increased to 60 feet along tidal shorelines on those fields utilizing conventional tillage methods. All agricultural fields shall maintain a 25 foot vegetated filter strip along tributary streams.
- (2) The width of the filter strip shall be measured landward from the mean high-water line of tidal water, edge of tidal wetlands, and from the edge of tributary streams (excluding drainage ditches). If the average slope of the strip is greater than six percent (measured from the water's edge to the landward edge of the strip, along a line perpendicular to the water), then the strip shall be expanded in four-foot increments for each one percent of slope over six percent;
- (3) The filter strip shall be composed of either trees and a dense ground cover, or a thick sod of grass, and shall be managed so as to provide water quality benefits and habitat protection consistent with the Shoreline Development Buffer purposes.
- (4) Invasive species and noxious weeds which occur in the filter strip, including Johnson grass, Canada thistle, and multiflora rose, may be controlled by authorized means.
- (5) The 25-foot vegetated filter strips shall be maintained until such time as the landowner is implementing, under an approved Soil Conservation and Water Quality Plan, a program of best management practices for the specific purposes of improving water quality and protecting plant and wildlife habitat; and provided that the portion of the Soil Conservation and Water Quality Plan being implemented achieves the water quality and habitat protection objectives of the 25-foot vegetated filter strip.
- (6) Farming activities, including the grazing of livestock, shall not disturb stream banks, tidal shorelines, or other Habitat Protection Areas.
- (7) Where agricultural use of lands within the Shoreline Development Buffer ceases and the lands are proposed to be converted to other uses, the Shoreline Development Buffer shall be established. The Buffer shall be established landward from the mean high water line of tidal waters, the edge of tributary streams, and the edge of wetlands.

(2) Best Management Practices

Best management practices shall include:

- (1) A grassland and manure management program where determined to be appropriate by the Soil Conservation District.
- (2) The feeding or watering of livestock may not be within 50 feet of the mean high-water line of tidal water and edge of tidal wetlands, and of tributary streams whichever is further inland.

(3) Soil Conservation and Water Quality Plan

- (1) Qualifying landowners shall have in place and be implementing a current Soil Conservation and Water Quality Plan approved by the Soil Conservation District that adheres to the agricultural components of the Maryland 208 Water Quality Plan.
- (2) Until such time as a Soil Conservation and Water Quality Plan is in place, landowners shall use the following practices:
 - (a) Proper nutrient application rates;
 - (b) Appropriate timing and method of nutrient application;
 - (c) Reduced tillage practices;
 - (d) Crop rotation; and
 - (e) Cover crop
- (3) In preparing the plan, the landowner shall select and implement, with the assistance of a technically trained soil conservation planner or technician, from among the several best management practices, those which minimize impacts to water quality, conserve fish, wildlife, and plant habitats, and integrate best with the farming operation. The plan shall:
 - (a) Assure that best management practices for the control of nutrients, animal wastes, pesticides, and sediment runoff are used to protect the productivity of the land base and enhance water quality. These practices shall minimize contamination of surface and groundwater and, further, shall minimize adverse effects on plants, fish, and wildlife resources.
 - (b) Assure that animal feeding operations, including retention and storage ponds, feed lot waste storage, and manure storage, minimize the contamination of water bodies.
 - (c) Identify areas of significant sheet and gully erosion and propose best management practices.
 - (d) Include a 25-foot filter strip, as described in §190-133.B.
 - (e) Protect habitat protection areas.

(4) Timber Harvesting

Timber harvesting shall conform to the requirements of §190-134, Forestry activities.

§ 190-134. Forestry activities

A. Purposes and General Plan Requirements

- (1) The purposes of the regulations in this section are to:
 - (1) Maintain and increase the forested vegetation of the Critical Area;

- (2) Conserve forests and developed woodlands and provide for expansion of forested areas;
 - (3) Minimize the removal of trees associated with development activities, and provide for mitigation where appropriate;
 - (4) Protect and enhance forest resources in the Shoreline Development Buffer.
- (2) Plans required under this section shall:
- (1) Include measures to protect surface and groundwater quality;
 - (2) Identify whether the activities will disturb or affect habitat protection areas and incorporate protection measures for these areas;
 - (3) Provide for the continuity of habitat through forest management techniques which include scheduling, size, timing and intensity of harvest cuts, afforestation and reforestation;
 - (4) Consider forests as a protective land use to be managed so that maximum values for wildlife, water quality, timber, recreation, and other resources can be maintained, recognizing that, in some cases, these uses may be mutually exclusive.

B. Required approvals for each type of forestry activity

- (1) The following table lists the different types of forestry activities. The Planning Office shall decide if removal is permitted based on considerations including but not limited to the following:
- (1) The number of trees or area of vegetation, if any, to be removed,
 - (2) Slopes,
 - (3) Potential for erosion, and
 - (4) Whether mitigation will be required.
- (2) For any activity not listed below, the Planning Director shall determine what type of plan or permit is required.

Table VI-1. Forestry Activity Approvals

Activity		Plan or permit required prior to undertaking activity
1	All timber harvesting occurring within any one-year interval and affecting one or more acres in forests and/or developed woodland.	Critical Area Timber Harvest Plan, Forest Preservation Plan
2	All timber harvesting in the Shoreline Development Buffer regardless of the size area affected.	Critical Area Timber Harvest Plan, Forest Preservation Plan
3	Any development activity which results in the cutting or clearing of any portion of a forest or developed woodland or individual trees.	Forest Preservation Plan
4	Development activities resulting in substantial alterations on parcels that have less than 15 percent of the site in forest or developed woodland.	Forest Preservation Plan

Activity		Plan or permit required prior to undertaking activity
5	Mitigation required under this Article.	Forest Preservation Plan
6	Development activity on land within the Shoreline Development Buffer where agricultural use buffer ceases.	Forest Preservation Plan
7	The cutting of trees or removal of natural vegetation where necessary for water-dependent facilities, for access to the shore or to private piers, or to install or construct a shore erosion protection device or measure.	Forest Preservation Plan
8	The cutting of individual trees for personal use.	Forest Preservation Plan
9	Removal of individual trees which are in danger of falling and causing damage to dwellings or other structures, or which are in danger of falling and therefore causing the blockage of streams, or resulting in accelerated shore erosion.	Forest Preservation Plan or Property Maintenance Permit
10	Horticultural practices, including thinning, necessary to maintain the health of individual trees, or removal of trees that are dead, diseased or damaged from natural causes and are unlikely to survive.	Forest Preservation Plan or Property Maintenance Permit
11	Other cutting techniques which may be undertaken under the advice and guidance of the Maryland Departments of Agriculture and Natural Resources, if necessary to preserve the forest from extensive pest or disease infestation or threat from fire.	Forest Preservation Plan
12	Removal of invasive species, including Johnson grass, Canada thistle, and multiflora rose.	Property Maintenance Permit

C. Forest Preservation Plans

(1) Preparation; Submittal; Decision

- (1) The Planning Director shall publish an application form and a checklist of required information for Forest Preservation Plans.
- (2) At a minimum, the Forest Preservation Plan shall show existing vegetation, vegetation proposed to be removed, and proposed planting, including the size, species and location of all plantings.
- (3) The Planning Director may require that a Forest Preservation Plan be prepared by a registered professional forester or other qualified professional.
- (4) The application shall be filed with and decided by the Planning Office.

(2) Criteria. The following criteria shall be used in preparing Forest Preservation Plans for sites in the RC, RR, TR, and VC Districts of any size, and sites in the LC, GC, and LI districts covering less than 20 acres:

- (1) Existing forests and developed woodlands in Habitat Protection Areas shall be protected.

- (2) The following standards shall apply to the removal of existing forest or developed woodland:
- (a) The removal of any existing forest or developed woodland shall be limited to 20 percent of the forest use on any parcel.
 - (b) The remaining 80 percent shall be protected and maintained through fee title donation, conservation easements, cooperative agreements with landowners and/or special provisions in forest management plans. The Planning Director shall approve the delineation of the area to be protected and the protection method.
 - (c) Any natural vegetation, forest or developed woodland that has been removed shall be replaced on a not-less-than-equal-area basis, with the same species or a species appropriate to the site. Preferred location for replacement shall be on-site and adjacent to existing woods, streams or other natural habitat.
 - (d) An additional 10 percent of any forest or developed woodland may be removed from forest use, provided that the replacement forest shall be 1.5 times the entire area of the forest or developed woodland being removed.
 - (e) A fee-in-lieu shall be provided to the County, adequate to ensure the restoration or establishment of an equivalent forest area, if the area of the site precludes the implementation of Subsections (iii) and (iv) above. The amount of the fee shall be determined in the fee schedule adopted by the County Council.
 - (f) Surety shall be provided by the property owners or developers in an amount acceptable to the Talbot County Council that will be suitable to assure satisfactory forest replacement as required in Subsections (iii) and (iv) above.
 - (g) The Planning Director may require approval of an erosion and sediment control plan for the project prior to approving a forest preservation plan.
 - (h) Any vegetation removed before obtaining required permits, or any forest area removed that exceeds the maximum allowed in Subsections (iii) and (iv) above, shall be replaced at three times the area of forest removed;
- (3) Pathways. Vegetation may be removed for pathways to the shore or piers in accordance with Table VI-1 above. The pathways shall be:
- (a) Direct and no longer than necessary,
 - (b) No wider than six feet,
 - (c) Constructed to maintain as much canopy as possible, and
 - (d) Surfaced with grass or similar low vegetation, stabilized only with pervious wood chips.

- (e) In areas of steep slopes, wooden stairways may be constructed as approved by the Planning Director.
 - (4) Unforested or partially forested parcels or lots existing as of August 13, 1989, shall be planted to provide a forest or developed woodland cover of at least 15 percent.
 - (3) Criteria. The following criteria shall be used in preparing Forest Preservation Plans for sites in the Limited Commercial, General Commercial, and Limited Industrial Districts of 20 or more acres:
 - (1) Forest and developed woodland resources shall be enhanced through techniques such as urban forestry (street tree plantings, gardens, landscaping, open land buffer plantings);
 - (2) Destruction of forest and woodland vegetation shall be minimized; and
 - (3) Existing forests and developed woodlands in Habitat Protection Areas shall be protected.
 - (4) Implementation and maintenance
 - (1) A Forest Preservation Plan shall include either of the following:
 - (a) A time period for implementing the plan and provisions for a final inspection by the County after which the plan will be certified complete; or
 - (b) Provisions for removal of invasive species and/or maintenance of natural vegetation for a period of up to five years, including provisions for annual inspection by the County.
 - (2) Approval of a Forest Preservation Plan authorizes the current property owner to maintain the approved area or activity in accordance with the plan, without any requirement for reapplication or reapproval.
- D. Property Maintenance Permits
- (1) The Planning Director shall publish an application form and a checklist of required information for Property Maintenance Permits.
 - (2) The application shall be filed with and decided by the Planning Office.
 - (3) In approving the application the Planning Office may include conditions necessary to achieve the purposes and general plan requirements of this section.
- E. Critical Area Timber Harvest Plans
- (1) Procedures
 - (1) The plan shall be prepared by a registered professional forester or the MD Forest Service.
 - (2) The plan shall be submitted to the Talbot County Forest Conservancy District Board and, upon approval, to the Talbot County Soil Conservation District.

- (3) Upon approval by the Talbot County Soil Conservation District, the plan shall be forwarded to the Planning Office which shall issue a Forest Preservation Plan, and provide a copy to the Department of Natural Resources and to the Critical Area Commission.
- (2) Criteria
 - (1) Cutting or clearing of trees within the Shoreline Development Buffer is prohibited, except that commercial harvesting of trees may be permitted in the portion of the buffer more than 50 feet from the mean high-water line of tidal water and edge of wetlands, and more than 50 feet from tributary streams. Such harvesting shall allow the selective cutting of any species or clear cutting of Loblolly Pine and Tulip Poplar trees.
 - (2) Commercial harvesting shall not be permitted within those portions of the Shoreline Development Buffer located in the following habitat protection areas:
 - (a) Forest interior dwelling bird (FIDS);
 - (b) Habitats of threatened and endangered species or species in need of conservation;
 - (c) Anadromous fish propagation waters; and
 - (d) Plant and wildlife habitats.
 - (3) For harvest activities within the Shoreline Development Buffer the Timber Harvest Plan shall also insure that:
 - (a) Disturbance to stream banks and shorelines is avoided;
 - (b) The area disturbed or cut will be replanted or allowed to regenerate in a manner that assures the availability of cover and breeding sites for wildlife, and reestablishes the wildlife corridor function of the Shoreline Development Buffer; and,
 - (c) The cutting does not involve the creation of logging roads and skid trails within the Shoreline Development Buffer.
 - (d) Commercial harvesting practices shall be conducted to protect and conserve the habitat protection areas in accordance with §190-140 through 143.
- (3) Erosion and Sediment Control Plan
 - (1) For any timber harvest which will disturb an area of 5,000 square feet or more, including harvesting of trees on agricultural lands, a sediment control plan shall be submitted to the Soil Conservation District. This plan is also required for any harvests which cross tidal streams.
 - (2) This plan shall be developed according to the state guidelines entitled: "Standard Erosion and Sediment Control Plan for Harvest Operations".
- (4) Implementation and Enforcement

Harvest operations shall be implemented in accordance with specifications set out by the Maryland Department of Natural Resources. The County will enforce the Timber Harvest Plan.

§ 190-135. Stormwater

A. Purpose

The purposes of the regulations in this section are to address the quality and quantity impacts of development activities so as to maintain and improve the water quality of the runoff and streams emptying into the Chesapeake Bay.

B. Plan Required, Approval, Conflicting Provisions, Limits on Location

- (1) A stormwater management plan shall be prepared for all development activities consistent with the requirements of Chapter 164 of this Code (Stormwater Management).
- (2) The stormwater management plan shall be approved by the Department of Public Works.
- (3) In the event of conflicting provisions between this section and Chapter 164, the provisions of Chapter 164 shall apply, as required by the Department of Public Works.
- (4) Facilities for treatment of stormwater within the Critical Area shall not serve development outside of the Critical Area.

C. Resource Conservation Areas (RCA) and Limited Development Areas (LDA)

- (1) Development activities shall not cause downstream property, watercourses, channels, or conduits to receive stormwater runoff at a higher volume or rate than would have resulted from a ten-year storm were the land in its predevelopment state; and
- (2) Stormwater storage facilities shall be designed with sufficient capacity to achieve the water quality goals of this section and to eliminate additional runoff caused by the proposed development in excess of that which would have come from this site if it were in its predevelopment state.

D. Intensely Developed Areas (IDA)

- (1) At the time of development or redevelopment technologies as required by applicable State and local ordinances shall be applied by anyone undertaking development activities in order to minimize adverse impacts to water quality caused by stormwater.
- (2) In the case of redevelopment, if these technologies do not reduce pollutant loadings measured by use of the keystone pollutant method by at least 10 percent below the level of pollution on the site prior to redevelopment, then offsets shall be provided. Guidance for compliance with this requirement is provided in the Maryland Chesapeake and Atlantic Coastal Bays Critical Area 10% Rule Guidance – Fall 2003 (the 10% Rule Guidance) and as may be subsequently amended.

- (3) In the case of new development, offsets as determined by the County shall be used if they reduce pollutant loadings by at least 10 percent of the pre-development levels. Guidance for compliance with this requirement is provided in the 10% Rule Guidance.
- (4) Offsets may be provided either on or off site, provided that water quality benefits are equivalent, that the benefits are obtained within the same watershed, and that the benefits can be determined through the use of modeling, monitoring or other computation of mitigation measures. Guidance regarding offsets is provided in the 10% Rule Guidance.

§ 190-136. Lot Coverage

- A. In Resource Conservation Areas (RCA) and Limited Development Areas (LDA), lot coverage is limited to 15 percent of a parcel or lot, except as provided in the following subsections.
- B. For parcels or lots existing on or before December 1, 1985:
 - (1) Lot coverage shall be limited to the following:

Table VI-2 Lot coverage limits for lots existing December 1, 1985

Lot size	Maximum lot coverage
½ acre or less	25 percent of lot area
Greater than ½ acre	15 percent of lot area

- (2) The Planning Director may approve greater lot coverage than allowed by subsection (1) above based upon findings that the following criteria are satisfied:
 - (1) New lot coverage on the property has been minimized;
 - (2) Water quality impacts associated with runoff from the new development activities that contribute to lot coverage will be minimized through site design considerations or use of best management practices.
 - (3) The property owner performs on-site mitigation as required by the Planning Director to offset potential adverse water quality impacts from the new development activities that contribute to lot coverage.
- (3) Planning Director approval of greater lot coverage shall be limited to:
 - (1) Lot or parcel one-half acre or less in size: total lot coverage shall not exceed lot coverage limits in Table VI-2 by more than 25 percent or 500 square feet, whichever is greater;
 - (2) Lot or parcel greater than one-half acre and less than one acre in size: total lot coverage shall not exceed 15 percent of the lot area or 5,445 square feet, whichever is greater.

- (4) The following table summarizes the limits set forth in paragraph (3) above:

Table VI-3. Maximum increase in lot coverage for lots existing December 1, 1985

Lot/Parcel size (square feet)	Maximum lot coverage with increase approvable by Planning Director
0 – 8,000	Area equal to 25% of parcel plus 500 square feet
8,001 – 21,780	Area equal to 25% of parcel plus one fourth of the 25%
21,780 – 36,300	5,445 square feet
36,301 – 43,560	15% of parcel

- C. If an individual lot one-acre or less in size is part of a subdivision approved after December 1, 1985:
- (1) The total lot coverage for the entire subdivision may not exceed 15 percent
 - (2) However, the lot coverage of an individual lot may exceed 15 percent.
- D. In Intensely Developed Areas (IDA), permeable ground surfaces shall be established in vegetation.
- E. A lot or parcel legally developed as of July 1, 2008, in accordance with the impervious surface requirements in effect at the time of construction, is legally nonconforming for purposes of lot coverage requirements. See Article VIII for nonconforming structure provisions.

§ 190-137. Tributary Stream Management

All development activities that must cross or affect streams shall be designed to:

- A. Reduce increases in flood frequency and severity that are attributable to development;
- B. Retain tree canopy so as to maintain stream water temperature within normal variation;
- C. Provide a natural substrate for stream beds; and
- D. Minimize adverse water quality and quantity impacts of stormwater.

§ 190-138. Habitat Protection Areas, Habitat Protection Plans

- A. Habitat protection areas are the following: the shoreline development buffer, nontidal wetlands, habitats of species in need of conservation, threatened and endangered species, plant and wildlife habitat areas, and anadromous fish propagation waters.
- B. A habitat protection plan is required when a proposed subdivision would affect a habitat protection area.
- C. The Planning Director may require a habitat protection plan for types of development activity other than subdivisions.

- D. A habitat protection plan shall be prepared by a professional biologist, ecologist, or other professional qualified to prepare such plans.
- E. The habitat protection plan shall show how the development activity will meet the purposes and specific requirements for each type of habitat protection area set forth in the individual habitat protection area sections in this Article.
- F. The following general criteria apply to all habitat protection areas.
 - (1) Roads, bridges, and utilities may not be located in any habitat protection area unless no feasible alternative exists.
 - (2) All roads, bridges, and utilities that must cross a habitat protection area shall be located, designed, constructed, and maintained so as to provide maximum erosion protection and minimize negative impacts to wildlife, aquatic life and their habitats and maintain hydrologic processes and water quality.

§ 190-139. Shoreline Development Buffer

A. Establishment; Measurement

- (1) The Shoreline Development Buffer shall be measured landward from the mean high water line of tidal waters or the edge of tidal wetlands.
- (2) The Shoreline Development Buffer shall be:
 - (1) At least 200 feet wide for subdivisions and site plans submitted after July 1, 2008, within the Resource Conservation Area.
 - (2) At least 100 feet wide for all lots legally created prior to July 1, 2008 or lots for which subdivision plans were submitted before July 1, 2008 and final plats were recorded on or before January 1, 2010, within the Resource Conservation Area;
 - (3) At least 100 feet wide for lots within the Limited Development Area or Intensely Developed Areas; and,
 - (4) At least 100 feet wide from the edge of tributary streams.
- (3) A buffer expansion as defined in Article XI shall be required, beyond the minimum 100 foot or 200-foot Shoreline Development Buffer, to include and extend beyond contiguous, sensitive areas, such as soils with slopes 15 percent or greater, hydric soils, or highly erodible soils, whose development or disturbance may impact streams, wetlands, or other aquatic environments.
 - (1) In the case of contiguous slopes of 15 percent or greater, the Shoreline Development Buffer shall be expanded four feet for every one percent of slope, or to the top of the slope, whichever is greater in extent.
 - (2) Where highly erodible soils or hydric soils are found to be contiguous with the Shoreline Development Buffer, the following criteria shall be used to determine the extent of the expanded buffer:

- (a) Where it is demonstrated that no tidal wetlands, nontidal wetlands or tributary streams exist within 200 feet of the Shoreline Development Buffer, expansion is not required.
 - (b) Where it is demonstrated that any of the natural features identified in (i) above exist within 200 feet of the Buffer, and where the existing slope is between 5-10%, the Buffer shall be expanded 50 feet beyond the edge of the standard Shoreline Development Buffer.
 - (c) Where it is demonstrated that any of the natural features identified in (i) above exist within 200 feet of the Buffer, and where the existing slope is between 10-15%, the Buffer shall be expanded 100 feet beyond the edge of the standard Shoreline Development Buffer.
- (4) The 200-foot Shoreline Development Buffer may be reduced if the strict application of the minimum 200-foot buffer would preclude:
 - (1) Subdivision of the property at a density of one dwelling unit per 20 acres, and all other state and local requirements will be satisfied; or,
 - (2) An intra-family transfer as permitted by the RC District standards.
- (5) In Buffer Management Areas, under certain conditions, Shoreline Development Buffer setbacks may vary in accordance with provisions set forth in §190-146.

B. Purpose

The Shoreline Development Buffer shall be established and managed to achieve or enhance the following functions:

- (1) Remove or reduce the sediments, nutrients, and potentially harmful or toxic substances in runoff entering the Bay;
- (2) Minimize the adverse effects of human activities on wetlands, shorelines, stream banks, tidal waters, and aquatic resources;
- (3) Maintain an area of transitional habitat between aquatic and upland ecological communities;
- (4) Maintain the natural environment of streams;
- (5) Protect riparian wildlife habitat; and
- (6) Maintain natural vegetation.

C. Requirements

- (1) The Shoreline Development Buffer shall be shown on the plan for any development activity.
- (2) New development activities, including structures, fences, roads, parking areas and other impervious surfaces, mining and related facilities, or septic systems, are not permitted in the buffer, except for those necessarily associated with water-dependent facilities or individual private piers.

- (3) Lot coverage in the buffer may not exceed the minimum amount necessary for water-dependent facilities, regardless of the Critical Area classification or the size of the parcel or lot, except:
 - (1) In Buffer Management Areas, or
 - (2) If a variance is granted in accordance with §190-182.
- (4) Cutting or clearing existing natural vegetation in the Shoreline Development Buffer is permitted only as approved by the Planning Office. See §190-134, Forestry Activities.
- (5) Existing areas of public access to the shoreline, such as foot paths, scenic drives, and other public recreational facilities, shall be maintained, with new facilities encouraged in LC, GC, and/or LI zoning districts of 20 or more contiguous acres.
- (6) Establishment of the Shoreline Development Buffer
 - (1) Where agricultural use of lands within the Buffer ceases and the former agricultural lands are proposed to be converted to other uses, the Buffer shall be established in natural vegetation.
 - (2) A Forest Preservation Plan shall be prepared for the proposed planting. See §190-134, Forestry Activities.
 - (3) Any lands within Shoreline Development Buffer required to be established in forest vegetation may be credited towards any afforestation, reforestation, or mitigation required under §190-134, Forestry Activities.
- (7) Normal and customary maintenance of lawns located in the Shoreline Development Buffer that were established prior to November 2004 may continue until an approved substantial alteration or change of use occurs.

§ 190-140. Nontidal wetlands

- A. A permit shall be obtained from the Maryland Department of the Environment for any activity regulated under COMAR 26.23 (Nontidal Wetlands) that is proposed as part of a development activity in or within 25 feet of nontidal wetlands.
- B. A minimum 25-foot buffer around nontidal wetlands shall be maintained.
- C. Nontidal wetlands and a 25-foot buffer shall be shown on all required plans and plats including, but not limited to concept plans, subdivision plans, forest preservation plans, and site plans.

§ 190-141. Threatened and Endangered Species; Species in Need of Conservation

A. Purpose

The purpose of this section is to provide protection for threatened and endangered species, for species in need of conservation, and for the habitats of these species in the Critical Area.

B. Species

- (1) Species protected under this section include, but are not necessarily limited to the Bald Eagle, Delmarva Fox Squirrel, and the Sedge Wren.
- (2) As part of the habitat protection plan the applicant shall coordinate with the DNR to identify any threatened and endangered species and species in need of conservation that might be affected by the proposed development activity, and to identify protection and management mechanisms.

C. Requirements

The habitat protection plan shall include measures to protect threatened and endangered species and species in need of conservation. These measures shall include:

- (1) Designation of protection areas around the habitats of the species.
- (2) A program for protecting the habitats of the species which may include, but are not limited to areas or periods of restricted access or activity, conservation easements, cooperative agreements with landowners, special provisions in forest preservation plans, soil conservation and water quality plans, soil erosion and sediment control plans, or other plans.

§ 190-142. Plant and Wildlife Habitat Areas

A. Purpose

The purpose of this section is to:

- (1) Conserve wildlife habitat in the Critical Area;
- (2) Protect those wildlife habitats that tend to be least abundant or which may become so in the future if current land-use trends continue;
- (3) Protect those wildlife habitat types which are required to support the continued presence of various species; and
- (4) Protect natural heritage areas.

B. Plant and Wildlife Habitat Areas

Plant and wildlife habitat areas include:

- (1) Colonial water bird nesting sites;
- (2) Historic waterfowl staging and concentration areas in tidal waters, tributary streams or tidal and nontidal wetlands;
- (3) Existing riparian forests (for example, those relatively mature forests of at least 300 feet in width which occur adjacent to streams, wetlands, or the Bay shoreline and which are documented breeding areas);
- (4) Forest areas utilized as breeding areas by forest interior dwelling birds and other wildlife species (for example relatively mature forested areas within the Critical Area of 50 acres or more or forest connected with such areas) – see Critical Area Commission publication entitled, A Guide to the Conservation of Forest Interior Dwelling Birds in the Chesapeake Bay Critical Area, dated June 2000, and as may be subsequently amended;

- (5) Natural Heritage Areas;
- (6) Other areas which may in the future be identified by state and federal agencies as important plant or wildlife habitat areas;
- (7) Other plant and wildlife habitats determined to be of local significance; and,
- (8) Nontidal wetlands.

C. Requirements

The habitat protection plan shall include measures to protect and enhance plant and wildlife habitat areas. These measures shall include:

- (1) Buffer areas for colonial water bird nesting sites. Protect these areas from development activities and from disturbance in the breeding season.
- (2) Locate new water-dependent facilities so as to prevent disturbance to sites of significance to wildlife such as historic, aquatic staging and concentration areas for waterfowl.
- (3) Protect and conserve forested areas required to support plant and wildlife species (see A Guide to the Conservation of Forest Interior Dwelling Birds in the Chesapeake Bay Critical Area, dated June 2000, and as may be subsequently amended). Management measures may include, but are not limited to:
 - (1) Clustering development,
 - (2) Other site design practices,
 - (3) Easements and other land preservation techniques,
 - (4) Preserve vertical diversity of plant type by maintaining natural bush and ground cover layers beneath stands of trees.
- (4) Provide effective connections between wildlife habitat areas.
- (5) Protect by appropriate means locally significant plant and wildlife habitats. (Examples of these areas are those whose habitat values may not be of Statewide significance, but are of importance locally or regionally because they contain species uncommon or of limited occurrence in the County, or because the species are found in unusually high concentrations).
- (6) Protect natural heritage areas from alteration due to development activities or cutting or clearing so that the structure and species composition of the areas are maintained.
- (7) Incorporate plants with high benefit to wildlife into development.

§ 190-143. Anadromous Fish Propagation Waters

A. Purpose

The purposes of this section are:

- (1) Protect the in-stream and streambank habitat of anadromous fish propagation waters;

- (2) Promote land use policies and practices in the watershed of spawning streams which will minimize the adverse impacts of development on the water quality of the streams; and
- (3) Provide for the unobstructed movement of spawning and larval forms of anadromous fish in streams.

B. Anadromous Fish Propagation Waters

Bodies of water that have been identified as spawning areas in Talbot County are shown on the Aquatic Habitats Resource Map published by the Maryland Department of Natural Resources.

C. Requirements

- (1) Land use and site design practices in the watershed of spawning streams shall minimize the adverse impacts of development on the water quality of the streams. Any adverse impacts of any activities shall be avoided by:
 - (1) Minimizing development activities or other land disturbances in the watershed;
 - (2) Maintaining or, if practicable, improving water quality in streams;
 - (3) Minimizing, to the extent possible, the discharge of sediments into streams; and
 - (4) Maintaining or, if practicable, increasing the natural vegetation of the watershed.
- (2) Unobstructed movement in streams shall be provided for spawning and larval forms of anadromous fish. The construction or placement of dams or other structures that would interfere with or prevent the movement of spawning fish or larval forms in streams shall be prohibited. The removal of existing barriers shall be accomplished wherever possible;
- (3) The construction, repair, or maintenance activities associated with bridges or other stream crossings, or with utilities and roads, which involve disturbance of the Shoreline Development Buffer or which occur in-stream, shall be prohibited between March 1 and June 15;
- (4) The installation or introduction of concrete riprap or other artificial surfaces onto the bottom of natural streams shall be prohibited unless it can be demonstrated that water quality and fisheries habitat can be improved.
- (5) Channelization or other physical alteration which may change the course or circulation of a stream and thereby interfere with the movement of fish shall be prohibited;
- (6) Construction of shore-based facilities (such as marinas), dredging, filling, and construction of jetties or bulkheads shall not be allowed in areas of established submerged aquatic vegetation within spawning waters;

§ 190-144. Shoreline Stabilization Measures

A. Plan required

- (1) A shore erosion protection works plan shall be prepared when measures are proposed to protect eroding and rapidly eroding portions of the shoreline. Improvements to protect property against erosion shall consist of nonstructural shoreline stabilization measures that preserve the natural environment, such as Marsh Creation, except in areas:
 - (1) Designated by Maryland Department of the Environment (MDE) maps as appropriate for structural shoreline stabilization measures; or
 - (2) Where Maryland Department of the Environment (MDE) determines that nonstructural measures are not feasible, including areas of excessive erosion, areas subject to heavy tides, and areas too narrow for effective use of nonstructural shoreline stabilization measures.
- (2) For purposes of this section the terms “structural” and “nonstructural” shall be determined by Maryland Department of the Environment (MDE) or the Critical Area Commission.

B. Preparation and Submittal

- (1) A zoning certificate from the Department of Permits and Inspections is required prior to construction of shore erosion control measures.
- (2) The Shore Erosion Control Plan and Shore Erosion Control Project Evaluation Form shall be submitted to the Department of Permits and Inspections with the Zoning Certificate application. The Planning Office shall review the Shore Erosion Control Plan and supporting information for compliance with this section.
- (3) The plan shall include:
 - (1) A copy of all relevant, federal and state permits, including but not limited to, those approvals by the Maryland Department of the Environment and the U.S. Army Corps of Engineers.
 - (2) Specifications for the proposed shore erosion protection, including information on the design storm, calculated wave run-up, required stone weight, and other information required for review by Talbot County, the Maryland Department of the Environment and/or the US Army Corps of Engineers.
 - (3) Any other information necessary for review of the plan in relation to the criteria in this Code to include, but not limited to, Erosion and Sediment Control Plan, Stormwater Management Plan, Floodplain Management compliance, impacts to historical property or sites, environmental impacts to wildlife or aquatic habitats and oyster bars.
 - (4) Forest Preservation Plan delineating existing vegetative cover that would be removed and how it would be mitigated.
 - (5) Location and quantity of fill materials.
 - (6) Plans for restoration of disturbed area.

- (7) Copy of review comments from the Critical Area Commission.
- (8) Copy of a letter from the Critical Area Commission or the Maryland Department of the Environment with a determination as to whether the project is considered structural or nonstructural.
- (9) If applicable and in accordance with section (h) above, a copy of an approved waiver from the Maryland Department of the Environment stating that nonstructural shoreline stabilization measures are not feasible if structural measures are proposed on the Shore Erosion Control Plan.

C. Criteria for Plans

The following criteria shall be used in developing and reviewing shore erosion control plans. These criteria shall be applied based on the written determination from the Critical Area Commission or the Maryland Department of the Environment as to whether the project is structural or nonstructural:

- (1) Use structural control measures only when nonstructural control measures would be impractical or ineffective,
- (2) Where structural erosion control is proposed use measures that best provide for conservation of fish and plant habitat,
- (3) Use nonstructural measures in areas of erosion where they would be a practical and effective method of erosion control,
- (4) Structural erosion measures are not to be encouraged in areas where no significant erosion occurs,
- (5) If significant alterations in the characteristics of a shoreline occur, the measure that best fits the change may be used for sites in that area, and
- (6) Habitat enhancement practices, such as dredge fill and marsh creation are encouraged.

§ 190-145. Erosion and Sediment Control

A. Plan required, purpose

- (1) An Erosion and Sediment Control Plan shall be prepared whenever development activities, including certain types of timber harvesting (see §190-134, Forestry Activities), involve any clearing, grading, transporting, or other forms of disturbance to land by the movement of earth.
- (2) The purpose of the plan is to ensure that:
 - (1) Erosion control is the basis for sediment control and that sediment control practices are designed to reduce adverse water quality impacts.
 - (2) Development activities on soils likely to generate sediment, because of composition, texture, slope, or permeability, include protection measures that adequately address these characteristics and will prevent significant adverse impacts on water quality or plant, fish, or wildlife habitat.

B. Plan Submittal, review, enforcement

- (1) Erosion and Sediment Control Plans shall be prepared consistent with Maryland State requirements for Erosion and Sediment Control in COMAR 26.17.01 and the most current standards and specifications for Erosion and Sediment Control.
- (2) The plan shall be reviewed and approved by the Talbot County Soil Conservation District.
- (3) Enforcement of Erosion and Sediment Control Plans is by the Maryland Department of the Environment.

§ 190-146. Buffer Management Areas

A. Creation

Buffer Management Areas (BMAs) are overlay zoning districts that may be created by the County Council pursuant to the procedures and standards set forth in Article IV, §190-112.

B. Applicability

The requirements in section C below apply to the following structures and uses in buffer management areas:

- (1) The construction of a primary dwelling or a principal structure.
- (2) The reconstruction, conversion, structural alteration, relocation or enlargement of, or attachment to, any primary dwelling or existing principal structure:
 - (1) Located within 100 feet of:
 - (a) The mean high-water line of tidal waters, or
 - (b) The edge of tidal wetlands or their tributary streams, and
 - (2) Located on a lot of record as of August 13, 1989.
- (3) Accessory structures.

C. Requirements

- (1) Residential zoning districts:
 - (1) The encroachment into the Shoreline Development Buffer for a new principal residential structure on an in-fill lot may be reduced to the average shoreward development setback of all existing principal structures within the community as depicted on the official zoning maps.
 - (2) Structures and other development activities shall be designed to minimize encroachment into the Shoreline Development Buffer, and in no case shall they be closer than 50 feet to mean high water, edge of tidal wetlands or tributary streams.
 - (3) New accessory structures and impervious surfaces shall not extend closer to the water than the residential dwelling or principal structure.
- (2) Nonresidential zoning districts:

- (1) New commercial, industrial or institutional uses shall not be located closer than 50 feet to mean high water except for water-dependent activities.
- (2) New accessory structures and impervious surfaces shall not extend closer to the water than 50 feet except for water-dependent activities.
- (3) Habitat protection areas. New construction may not impact any habitat protection areas.
- (4) Natural vegetation. Natural vegetation shall not be removed in the buffer management area except that required by the proposed construction.
- (5) Lot coverage. The total lot coverage of the Critical Area portion of the site shall be in compliance with the standards as set forth in §190-136 above in this Article.
- (6) Mitigation

Construction activity in a buffer management area shall be mitigated as follows:

- (1) The extent of the lot or parcel shoreward of the proposed construction shall be required to remain in natural vegetation, or shall be established and maintained in vegetation as listed in the Natural Vegetation Preferred Plantings List, available from the Talbot County Department of Planning and Zoning, and per subsection (b) below.
- (2) Mitigation equal to an area two times the square footage of the proposed lot coverage in the Shoreline Development Buffer area will be required to be planted within the Shoreline Development Buffer. Should on-site planting of required vegetation be precluded, an off-site Shoreline Development Buffer location may be established. The applicant shall be responsible for filing a Forest Preservation Plan with the Planning Office.
- (3) Should the on-site or off-site Shoreline Development Buffer locations preclude the implementation of the preceding paragraph, a fee-in-lieu shall be provided to the County adequate to ensure the restoration or establishment of an equivalent forest area in the Shoreline Development Buffer. The amount of the fee is established in the schedule of fees adopted by the County Council.
- (7) New lots. New lots created within buffer management areas are subject to full compliance with all development requirements as set forth in this chapter, including those for the Shoreline Development Buffer.
- (8) Administrative Appeals. When granting permission to allow construction in the Shoreline Development Buffer as the result of an Administrative Appeal, the Board of Appeals must find that the proposed construction meets the criteria set forth in this section for Buffer Management Areas and may impose such conditions and restrictions as are deemed necessary to mitigate any potential adverse impacts upon adjacent properties, the Shoreline Development Buffer, and habitat protection areas.

§ 190-147. Supplemental findings and requirements for water-dependent facilities

A. Uses included

As indicated in the Table of Land Uses in Article III, the following uses, which use water for transportation and derive economic benefits from shore access, may be allowed:

- (1) Private Piers, Community Piers and Related Boat Facilities;
- (2) Marinas; and,
- (3) Water-Oriented Public Recreation, Education, Research Areas.

B. Additional regulations

For the above uses, in addition to the specific requirements for the use in Article III and, where applicable, the findings and requirements for special exceptions in Article IX, the following regulations apply which the approving authority shall review as part of the development plan or special exception:

C. Required findings

The following findings must be made:

- (1) The request is consistent with the intent and purpose of the Maryland Chesapeake Bay Critical Area Law;
- (2) The activity shall have minimal individual and cumulative impact on water quality and fish, wildlife, and plant habitat in the Critical Area through design and location criteria;
- (3) The activity shall be water dependent;
- (4) The project shall meet a recognized private right or public need;
- (5) Non-water-dependent structures or operations associated with water-dependent projects or activities shall be located outside the buffer with sufficient area provided for these associated structures or operations.

D. Requirements

The following requirements must be met:

- (1) The activity shall not alter existing water circulation patterns or salinity regimes;
- (2) The activity shall maintain or improve the flushing characteristics of the water body adjacent to the activity;
- (3) Wetlands, submerged aquatic plant beds, or other areas of important aquatic habitats shall not be disturbed except for approved research projects;
- (4) The operation procedures shall preclude any adverse impacts to water quality that may occur as a result of the activity, such as non-point-source runoff, sewage discharge from land activities or vessels, or from boat cleaning and maintenance operations;
- (5) The operation procedures shall ensure that shellfish beds will not be disturbed or be made subject to discharge that will render them unsuitable for harvesting;

- (6) The construction procedures shall ensure that dredging will be conducted in a manner, and using a method, which causes the least disturbance to water quality and aquatic and terrestrial habitats in the area immediately surrounding the dredging operation or within the Critical Area;
- (7) The construction procedures shall ensure that dredged spoil will not be placed within the Shoreline Development Buffer or elsewhere in a habitat protection area except as necessary for:
 - (1) Backfill for permitted shore erosion protection measures;
 - (2) Use in approved vegetated shore erosion projects; and
 - (3) Placement on previously approved channel maintenance spoil disposal areas.
- (8) Interference with the natural transport of sand shall be minimized.

§ 190-148. Usable water area, harbor line, lateral lines

Prior to the construction of any pier, wharf, dock, marina or water-dependent facility, the usable water area shall be determined. The usable water area is the maximum water area that may be used for piers, pilings, buoys, and other such facilities, including open areas for navigation, and is the area bounded by the mean high-water line of a subject property, two side property line extensions, referred to as lateral lines, and a line connecting their channelward ends, referred to as the harbor line.

A. Determination of the harbor line

- (1) The length of each lateral line extension for the purposes of location of the harbor line and any point along the line connecting their channelward ends shall be limited to the lesser of:
 - (1) One-half the distance from the mean high-water line to the center point of a cove; or
 - (2) One-half the distance from the mean high-water line to the center line of the subject body of water; or
 - (3) 300 feet from the mean high-water line of the subject site.
- (2) In the event of conflict between the location of the harbor line through the method prescribed in Subsection A(1)(a), (b), or (c) above, and the location of any U.S. Army Corps of Engineers recognized channel, the most restrictive line shall apply for purposes of limiting construction.

B. Determination of the lateral line extension

The direction of a lateral line extension channelward from the mean high-water line shall be determined through the following method, which is illustrated in Figures A and B in this section.

- (1) Prepare a scale drawing showing the applicant's property and all adjacent waterfront properties within a minimum 200-foot radius of the shoreline owned by the

applicant. (A larger radius may be required when lot sizes and configuration so dictate). (See Figure A).

- (2) Locate the shoreline (mean high water) and harbor lines on the drawing. The harbor line shall be located as prescribed in subsection A above.
- (3) Intersect all property lines with the shoreline (Points A, B, C, D, E, and F on Figure A).
- (4) From the applicant's property line - shoreline intersections (Point D and E on Figure A) intersect at a 200-foot radius with the shoreline (Point 1 and 2 on Figure A).
- (5) From the applicant's property, connect all property lines - shoreline points, ending at Points 1 and 2 with straight lines (i.e., D to C, C to B, B to 1, and E to 2 on Figure A).
- (6) Bisect each respective angle formed by these straight lines and extend the lines bisecting the angle from the shoreline to the harbor line. These are lateral lines (B-G, C-H, D-I, E-J on Figure A).

C. Usable Water Area Conditions

The usable water area for the purposes of defining setbacks for structures as defined by lateral lines, shoreline and harbor line shall meet the following conditions:

- (1) If a pair of lateral lines extended to the harbor line result in a distance of 25 feet or more on the harbor line (lines G-H, H-I, I-J) the lateral lines are satisfactory, and define the usable water area.
- (2) If any pair of lateral lines, extended, intersect before reaching the harbor line, or when extended in a harbor line segment (G-H, H-I, I-J, Figure A) of less than 25 feet, an imaginary line shall be moved toward the shoreline and parallel to line D-E, (Figure B) until a 25-foot clearance is obtained (line N-O, Figure B).
- (3) Two additional lateral lines N-P and O-Q will be drawn perpendicular to line N-O to the harbor line. The lines D-N-P, E-O-Q are the new lateral lines for the applicant's parcel and the adjoining properties. For all amended lateral lines, construction will be limited to the area enclosed by the shoreline, the lateral lines (D-N, O-E) and the imaginary clearance line N-O (Figure B). This procedure will ensure adequate clearance for adjacent piers. These new lateral lines, the harbor line and the shoreline define the usable water area for the applicant.

Determination of Lateral Lines

